DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011357 Address: 333 Burma Road **Date Inspected:** 05-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Contractor: **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A Weld Procedures Followed: **Electrode to specification:** Yes No Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

CWI Inspectors: Mr. Yang Li, Mr. Liu Fa Wen

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG BAY 5

At around 2000 hours this QA Inspector observed ZPMC workers were performing heat straightening of bikepath cantilever beam BK001-046 and this activity is being monitored by ZPMC QC Inspector Mr. Shen Jian Guo. This QA Inspector observed a five ton weight sitting on this cantilever beam with one end of the weight resting on a small block of steel which concentrates the weight near the center of the 10 mm thick side plate that was being heat straightened. A review of ZPMC heat straightening record HSR1(B)-7802 indicates this cantilever beam is to be heat straightened and this document does not indicate that any weight or any other mechanical force is to be applied during the heat straightening process. On the bottom of this HSR document is signature block titled: "To be signed when closing HSR-Verify compliance and all necessary reports are ready to attach". This signature block had previously been signed on 12-28-2009 by CWI Mr. F. W. Lin #08126531. This signing indicates all heat straightening has previously been completed. ZPMC is still using this same "closed" document to perform heat straightening today. ZPMC CWI Mr. Li Jia informed this QA Inspector that he agrees that the HSR document does not indicate a weight is to be used during this heat straightening and the weight will not be used

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

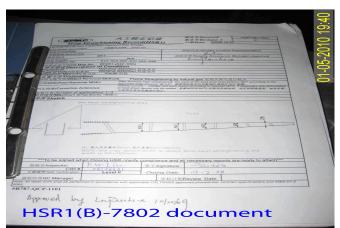
during any additional heat straightening. This QA Inspector informed Mr. Li Jia that an incident report is going to be issued to document this violation. See the photographs below for additional information.

Segment Assembly

This QA Inspector observed ZPMC welder Mr. Li Shu Qiang, stencil 53609 is using flux cored welding procedure WPS-B-T-2233-B-U2-F to make OBG butt weld OBW6C-004. This QA Inspector observed a welding current of approximately 235 amps and 24.5 volts. This QA Inspector verified Mr. Li Shu Qiang appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhang Hanming, stencil 220066 is using flux cored welding procedure WPS-B-T-2233-B-U2-F to make OBG weld OBW6C-004. This QA Inspector observed a welding current of approximately 210 amps and 23.8 volts. This QA Inspector verified Mr. Zhang Hanming appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wei Da Shuais stencil 51246 is using flux cored welding procedure WPS-B-T-2233-TC-U4b-F to make OBG side plate stiffener splice weld SP475-001-053. This QA Inspector observed a welding current of approximately 225 amps and 22.5 volts. This QA Inspector verified Mr. Wei Da Shuais appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.







WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer